## Viewing California's Past through Seeds and Science

On Saturday, October 20<sup>th</sup> we were pleased to celebrate International Archaeology Day by presenting two outstanding lectures at the **Maidu Museum & Historical Site**. While **Maidu Museum & Historical Site** offered hands on archaeological experience for children and family tours of their historical site, **Sacramento Archeological Society** featured lectures on how plants can be used to investigate California prehistory and how skeletons can shed light on the participation of women in California warfare.

**Eric Wohlgemuth,** Principal Investigator and Chief Archaeobotanist Far Western Anthropological Research Group, Inc. introduced Archaeobotany, a study of ancient plant remains. His work focuses on macro archaeological plant remains. This includes charred wood, seeds, fruit, nuts and roots. Eric reported that the leading plant remains from the California sites studied were wood, acorn nut shells, *Chenopdium rubum* seeds (red goose foot), and *brodiaea* corm (cluster-lilies) in that order. He noted how the distribution of these varied by location and by time period. He also compared the nutritional value of acorns, seeds, and corms with fish and shell fish and noted that fish provided the highest return rate (Kcal/hour). By studying this material he constructed historic reference maps of diet for regions of California

Al Schwitalla professional archaeologist and artifact reproduction specialist with more than 30 years of experience in central California presented recent research conducted with Marin Pilloud of the Department of Anthropology at the University of Nevada, Reno on the active participation of women in combat in California. By studying limited ethnographic evidence and sharp force trauma as reflected in skeletons he ascertained the probable involvement of men versus women in conflicts. From the data reviewed (289 males and 128 females in the period of 3050 BC to 1899) and patterns explored males and females were both subject to violent encounters in warfare. Injuries were grouped according to trajectory of injury, the timing of injury and the location of injury on the skeleton. He pointed out that factors including the introduction of bow and arrow and the medieval climactic anomaly may have played a role. Differences noted between the sexes were that males experience violence in higher numbers and were slightly more likely to show trauma on the facial skeleton, which may be an indicator of higher levels of face-to-face combat. Women were not passive by-standers in the creation, development, maintenance, and protection of their communities – rather they seem to have been active participants in their communities' defense.